

Exhibit C: Scope of Work and Schedule of Deliverables

Project Scope of Work Phases:

- A – City Hall Envelope Renovations
- B – City Hall Skylight Replacement
- C – City Hall Chiller Replacement
- D – City Hall Annex Plaza Waterproofing Renovations

The deliverables and requirements provided in Exhibit C shall be included in the Architect's Basic Services. Some of the descriptions overlap services described in Article 2 of the B141 and in Exhibit D, Project Design Procedures. The descriptions in each of these documents shall not reduce the level of services described in another. Please refer to all contract documents for the full scope of services.

Meeting minutes in agreed-to format for each meeting with the Owner are to be issued for review within 2 business days of the meeting.

SCHEDULE:

Within one week of notice to proceed, the architect shall submit a project schedule, with the due dates of the deliverables identified. Scheduled due dates will be based upon reasonable timeframes for Owner review, which have been mutually agreed upon with the Architect. The schedule shall also include scheduled dates for permit applications and submittals to authorities having jurisdiction (AHJ). The schedule shall be updated monthly to reflect contract progress over the previous pay period. If completion of a task on the schedule is extended or delayed, the updated schedule shall reflect those changes. If the extended task is on the critical path, then a recovery schedule shall be provided for the Owner's acceptance. The updated schedule shall be submitted monthly with invoices (invoices may not be paid unless updated project schedule is included).

Preliminary Milestone Schedule:

Notice to Proceed	9/15/2012
Pre-Design investigations	11/1/2012
Report of Findings and Recommendations/BODR	12/1/2012
City Review and Comments	1/1/2013
Schematic Design Submittal	1/15/2013
Design Development Submittal	3/15/2013
Construction Documents Submittal	5/1/2013
Final Contract Document Approval	5/15/2013
Bid and Contract Award Process	5/15/2013 – 8/15/2013
Construction Duration	8/15/2013 – 10/15/2014

DELIVERABLES

Investigation Report/BODR, Schematic Design, Design Development, 50% Construction Documents, 100% Construction Documents

Please provide all deliverables in printed and digital form—digital drawing files shall be submitted in PDF and AutoCAD LT 2010 compatible format. Each deliverable submittal shall consist of 24x36 drawing sets, 8.5x11 specifications and 8.5x11 prints of other deliverables. At all submittal stages, Architect shall submit six (6) complete sets of printed deliverables – including one (1) full-size drawing set and five (5) half-size drawing sets and one (1) electronic

submittal unless otherwise specified by the Owner. Each deliverable submittal shall include quality assurance correspondence, indicating that submittals have been checked and all comments have been resolved.

PROJECT SCOPE OF WORK

The project goal is to achieve sustainable, long-term solutions to City Hall and Annex building envelope, energy use and space utilization needs through a phased program, while maintaining safe building use and operations.

PHASE A - CITY HALL ENVELOPE

- Replacement of the fiber-reinforced concrete exterior wall cladding;
- Perform structural engineering studies of the areas where the exterior wall panels are to be removed and replaced; thoroughly analyze the supporting structure, and determine any modifications and/or repairs that may be required for successful installation of new exterior wall panels;
- Repair of exterior masonry, exterior building caulk joints and systems as determined necessary;
- Repair and/or replacement of flashings, copings, soffits and/or other building accessories as determined necessary;
- Removal and/or re-setting of windows, and other elements or devices within the building walls;
- Installation of new building insulation and vapor barrier throughout the exterior walls;
- Removal and/or replacement of concrete slab and related waterproofing systems at City Hall loading dock;
- Analyze and provide recommendation for remediation of all efflorescence on interior and exterior of building as needed.
- Replace exterior sidewalk at plaza area to City Hall main entrance and any other entrances as required to comply with ADA requirements and to coordinate aesthetically with wall panel replacement;
- Provide schematic design options as necessary for the City's review and approval, complete with estimates of probable construction costs using a CSI breakout;
- In preparation for future work at the City Hall Annex, as part of the scope of work within this contract shall include:
 - A rendered elevation of the new exterior panels at City Hall and potential new exterior panels at the Annex, such that both buildings are shown in the same elevation and to ensure that aesthetic aspects of the City Hall Envelope exterior panel recommendations and the future City Hall Annex exterior panel recommendations are compatible.
 - Rough Order of Magnitude conceptual/schematic estimates of the Annex second floor and Annex envelope for consideration in the holistic project and to prepare for future funding requests.

PHASE B - CITY HALL SKYLIGHTS

- Examine and study previously developed plans for this work; assess the completeness of the design, and make appropriate new designs as necessary for continuation and completion of the installation of City-owned skylights;
- Perform structural engineering studies of the areas where the skylights are to be installed; including the thorough investigation of the existing roof and wall structures,

loading issues related to the installation of the new skylights, and structural and architectural designs intended to implement and sustain installation.

PHASE C - REPLACEMENT OF CITY HALL CHILLERS

- Replace the existing City Hall chiller equipment with a new, modern system. The project will also address other Code-related issues with respect to the mechanical room, boiler room, HVAC Controls, and other related systems and building components.

PHASE D - CITY HALL ANNEX PLAZA

- Removal of the poured-in-place concrete topping slab and replacement of existing topping slab with new walking surface, type to be determined;
- Removal of all existing waterproofing systems below the topping slab and above the structural concrete slab;
- Design and installation new waterproofing system for exterior plaza;
- Replace of existing guardrails and provide new handrails/guardrails as required; design any required modifications to ramps and other elements as required for ADA compliance.
- Provide for all accessories and ancillary work as well as additional architectural, plumbing, mechanical, electrical or structural services that may be required.
- Provide schematic design options as necessary for the City's review and approval, complete with estimates of probable construction costs using a CSI breakout;

DESIGN SERVICES

Pre-Design Investigations and Recommendations

Architectural, Structural, Mechanical, Electrical, Plumbing and all other investigations necessary to acquire a full and complete understanding of the building or area, its structure, and its systems sufficient to ensure a complete and thorough design. Site investigations shall include survey, subsurface utility investigations, geotechnical investigations, environmental engineering to verify existing conditions as required. Investigations during the phases will include but not necessarily limited to:

- City Hall Envelope: Perform a survey of the existing building exterior envelope including the fiber-reinforced concrete panels and masonry wall cladding systems, windows, doors and concrete slab at loading dock. Conduct investigations to determine condition of cladding substrates, structural supports, water proofing, vapor barrier, building insulation, flashings, copings, soffits, joint sealants, and other components determined necessary.
- City Hall Skylights: Perform a survey of the existing skylights to verify the size and condition of the existing structural members and supports. Conduct above ceiling investigations to determine the location and condition of structural supports, water proofing, flashings, fireproofing and other components determined necessary.
- City Hall Chillers: Mechanical Penthouse and Systems Investigation: Perform a survey of the existing mechanical penthouse, chiller and controls systems.
- City Hall Plaza: Perform a survey of the existing plaza waterproofing system including the concrete topping, waterproofing, drains and leaders, railings and structure.

Basis of Design Report/Investigations Report

Based on the surveys and investigations, prepare and Basis of Design Report (BODR) for review and approval by the City. The BODR includes the proposed scope of work with preliminary cost estimates and schedule.

BASIC DESIGN SERVICES

Provide standard design services as outlined in Article 2 of the AIA B141 Standard Form of Agreement between Owner and Architect 1987 Edition. Design services include Architectural, Architectural Landscape, Civil, Structural, and Mechanical, Electrical, Plumbing Engineering.

GENERAL PROJECT REQUIREMENTS

- All work is to be performed using CAD software compatible with AutoCAD 10 LT.
- Conduct regular design meetings, minimum bi-weekly, or as required by the City.
- Provide detailed design schedule using Microsoft Project or Primavera 13 Scheduler; Update design schedule monthly.
- Responsible for all State, County, and City approvals. Prior to submittals, review project and submittals requirements with all authorities having jurisdiction over the project. Present plans to required departments/agencies for review / approval. All permit and approval sets shall be submitted to the City project manager for review one week prior to submittal to reviewing entity.
- Participate in all meetings with the Contractor.
- If the Architect's estimate of project costs exceeds the project budget, the Architect will participate in value management until the project budget can be met.
- If available, the Architect will provide project documentation on Primavera Website as instructed by the Owner.
- If available, the Architect will utilize standard file-sharing protocol and limit use of email and paper for the transmittal of documents that can be transmitted electronically using such protocol. Invoices and supporting documentation must be submitted to the Owner on paper.
- Prepare and issue meeting minutes for all design phases of work in an agreed-upon format within two business days for review.

SCHEMATIC DESIGN PHASE

100% Schematic Design Phase Scope and Deliverables shall include, at a minimum:

- Prepare multiple design concepts for City Staff consideration.
- Prepare schematic design plans on selected alternate(s).
- Provide a detailed third party estimate based on schematic scheme(s).
- Organize and conduct design meetings as necessary to gather project information and requirements, coordinate Owner and User needs, and resolve design issues sufficiently to meet the project's program requirements.
- Submittal shall include all documentation necessary to describe the full scope of the project, including all Owner-approved meeting minutes. Submittal (which may include an updated BODR) shall also include detailed design criteria, agreed upon program elements, alternative schemes and recommended scheme with construction phasing options and cost model.
- Attend owner meetings to coordinate and resolve value engineering, constructability, construction phasing and scheduling issues in the preliminary design.
- Make necessary presentations as required to stakeholders, City staff or others as required.
- Make presentations to all agencies having jurisdiction as necessary.

DESIGN DEVELOPMENT PHASE

100% Design Development Phase Deliverables (to be submitted after the schematic design phase documents have been reviewed with the architectural sub-consultant and a design has been accepted by the Owner) shall include, at a minimum:

- Based on the approved SD plans, further refine the design to include the following:
 - Demolition plans,
 - Layout and staking plans,
 - Building plans
 - Elevations
 - Sections
 - Details
 - Single line and/or riser diagrams for all mechanical, electrical and plumbing work.
 - Site plan
- Narrative for proposed building systems
- Preliminary Code summary
- Preliminary Permit summary
- Life safety plans
- Submit complete plans and applications to City/County Planning and Historic Preservation Commission and other regulatory agencies having jurisdiction as required for approvals and permits.
- In conjunction with the chiller replacement at City Hall, prepare an energy model to analyze the impact of various improvements to the building envelope and mechanical systems to determine their impact on energy use and sustainable design. Prepare a Life Cycle Cost Analysis to determine the long term cost impact on the building operation.
- Landscape plan, preliminary grading plan showing critical grades and compliance with ADA guidelines.
- Phasing plans
- Preliminary drawings by all engineering trades
- Outline form specifications
- Studies of various building materials and systems as requested by the owner. Agreed-to list of value management strategies and estimated project cost savings.
- Prepare a Design Development Cost Estimate reconciled with the project budget.
- Conduct meetings to develop bid alternates, unit prices, address constructability, value engineering, budget reconciliation, scheduling and other matters as required.

CONSTRUCTION DOCUMENT PHASE

50% Construction Document Phase Deliverables—in addition to previously submitted materials, the following shall be provided:

- Based on the approved DD plans, prepare construction documents and specifications to minimally include:
 - Demolition plans,
 - grading and drainage plans,
 - layout and staking plans,
 - site plans
 - architectural plans
 - elevations
 - sections
 - construction details
 - lighting and signage plans and details

- planting plans and details.
- Prepare a construction documents level cost estimate and updated project schedule; reconcile cost estimate.
- Incorporate bid alternates as necessitated by the project budget.
- Code summary
- Permit summary
- Developed wall sections, and building sections through all relevant spaces (min. four sections).
- Developed and coordinated engineering drawings
- Updated estimate of project cost in CSI 2004 standard format.
- Agreed-to list of value management strategies and estimated project cost savings, if necessary.
- Fully developed engineering drawings.
- Fully developed CSI 2004 specifications defining the contract requirements and level of quality.
- Final documents describing in detail all work to be done, with all necessary revisions made and input from previous submittal included.

100% Construction Document Phase Deliverables—in addition to previously submitted materials, the following shall be provided:

- Final documents describing in detail all work to be done, with all necessary revisions made and input from previous submittal included.
- Incorporate bid alternates approved by the City.
- Updated estimate of project cost in CSI 2004 standard format.

Permitting, Reviews and Approvals

- Review and / or present design concepts to the City of Durham Planning Department and any other regulatory agencies whose approval is necessary for the development of the site.
- Submit plans and applications to regulatory agencies.
- Secure approvals from all other local and state agencies as required for the development of the site.
- Coordinate the construction or relocation of privately owned utilities if necessary.
- Attend meetings as necessary for all approvals. Provide responses and modifications to regulatory comments

BIDDING AND NEGOTIATION PHASE

- Prepare bid documents and project bid manual incorporating all owner requirements. Manage the pre-qualification process as required.
- Issue Project Manual and Construction Documents (plans and specifications) for bidding as required, and issue clarifications and addenda as required during bidding.
- Conduct Pre-bid and award meetings
- Review bids received, prepare detailed bid tab, review all bids with the City representatives and make recommendations to the City for award.
- Assist owner in review and comparison of cost summary of submitted bid and alternates; Assist owner in negotiations if necessary.

CONSTRUCTION PHASE

- Conduct pre-construction conference.

- Provide construction administration and observation associated with the site improvements including a pre-construction conference, weekly (minimum or as appropriate) site observation and meetings for processing the contractors pay request.
- Provide interpretations of prepared drawings and specifications, shop drawing review and approval as well as preparation of change orders and construction change directives.
- Conduct regular site observations to monitor the progress of the work. Site visits will be held weekly by the architectural and engineering team at the project site or sites as appropriate. Provide City with Site Visit Report for each such visit – report shall include photographs documenting all ongoing work, issues, questions and resolutions.
- Attend weekly construction progress meetings, issue meeting minutes within 2 business days of meeting.
- Provide construction phase services in accordance with requirements outlined in the General Conditions to the Construction Contract, including but not limited to: shop drawing review, certifying applications for payment, responding to RFIs, preparing change orders, reviewing monthly Contractor schedule updates, issuing notices of contract non-compliance to the Contractor and monitoring project progress, costs and schedules.
- Prepare change orders and construction change directives for the Contractor's and Owner's signature.
- Perform substantial and final inspection punchlists, administering same and verifying that all such punchlist work is completed as required by the construction contract.
- Provide Certificate of Accessibility as required by City Inspections.
- With monthly invoices to Owner, provide updated date log of all RFIs received, resolved and closed.

CLOSEOUT PHASE

Post Construction and Warranty Support

- Prepare as-built documents based on information received from the contractor in AutoCAD LT 2010 compatible format or in such other format as the owner requires.
- Assist in project closeout and assistance in establishment of warranties and guarantees.
- Present to required departments/agencies for review; Responsible for all State, County, and City permit applications and approvals.
- Coordinate and review for compliance contractor closeout documents.
- Certify final application for payment.

Allowances for Additional Design Services- All Phases

Use of allowance to perform work must be requested in writing and approval in writing by the City prior to performing work. All approved work within allowances will be invoiced at cost (time and materials) with 10% markup permitted for administrative costs.

1. Contractor Services: Provide labor, material, equipment and insurance to perform destructive investigation of the various wall components using aerial and platform lifts. Includes, but is not limited to, repair of disturbed wall components, plus barricades, roof protection and removal of debris/cleaning. Street closing permits are to be provided by the Owner.
2. Enhanced On-Site Project Representation (during Construction): Provide additional on-site representation during construction administration for the building envelope and waterproofing renovation work at City Hall and Annex.

3. Environmental Engineering: Provide for additional environmental engineering services including, but not limited to, surveys, testing, reporting, design, preparation of bid documents, construction administration, air sampling, monitoring, and construction testing.
4. Fireproofing Engineering (Testing and Design): Provide fire engineering design services related to SFRM in City Hall.
5. Temporary Office Space (Planning): Provide planning services for temporary office space if required during construction. Services include, but are not limited to, space planning, furniture layout and move coordination.
6. Civil Site Survey: Survey the project area as needed to complete the design and construction documentation. Also includes surveying services for verification of accessible site elements as part of the accessibility compliance certification as required by the City of Durham Inspections Department.
7. Sustainable Design Analysis and Energy Modeling: Prepare an energy model to analyze the impact of various improvements to the building envelope and mechanical systems to determine their impact on energy use and sustainable design.
8. Printing Services: Provide document printing and bid document services.

Exclusions:

The following are not included in the scope of work except as described below:

1. City Hall Envelope: Brick removal or replacement: Scope of work is based on renovation of the existing brick masonry on the City Hall building in place. Should existing conditions or other City needs/objectives dictate removal and replacement of the brick masonry on the majority of the City Hall building exterior, the project cost would increase by \$1.8M to \$2.1M and the project construction schedule would increase by 6-7 months. If brick masonry removal and replacement is required on City Hall or the Annex building, Architect will prepare request for additional services for masonry replacement design for the City's consideration.
2. Responsibility for removal of loose or at risk masonry or GFRC panels, trim or other wall elements. Architect will promptly notify the Owner of at-risk elements observed during our site investigations.
3. Existing building davit or tie-back certification, load testing or inspection.
4. Below grade waterproofing investigation or excavation.
5. Inspection design or modification of site drainage, foundation drains, stormwater piping, or related mechanical systems or sump pumps.
6. Civil Engineering services are limited to topographic surveys to determine ADA compliance of accessible routes for City Hall and Annex. No stormwater calculations, erosions control, water, sanitary sewer, traffic engineering or transportation evaluation services are included.
7. Security systems or structures
8. Any permits (street closing, building, site fees), application (Site Plan submittal, review) and utility fees
9. Administrative costs to obtain a high performance rating, such as LEED.